




HGM Statement of Qualifications

To: Mr. Bryce West, Peabody Energy
From: Rick Larsen, Eco-Tech Consultants, Inc. 
Subject: **Eco-Tech Western Kentucky HGM Qualifications**
Eco-Tech Consultants Project LV2017009

Date: April 25, 2017

Founded in 1990, Eco-Tech Consultants, Inc. (Eco-Tech) is an ecological consulting firm with offices in Kentucky and Georgia. Our scientists perform a vast range of services, including endangered species surveys and consultation, aquatic and terrestrial ecological evaluations, habitat assessment and management, wetland delineation and restoration, stream geomorphology and natural channel design, watershed assessment, environmental documentation and permitting, and Geographic Information Systems (GIS) mapping and analysis. Eco-Tech staff have worked successfully with agency representatives from the Louisville District USACE, IDEM Section 401WQC/Isolated Wetland Program and IDNR offices on various aquatic resource projects for over 25 years.

Eco-Tech specializes in identifying and delineating aquatic resources, as well as providing guidance on permitting, mitigation of impacts, and monitoring and maintenance of compensatory mitigation sites. We have performed wetland delineations and functional assessments, permitted impacts through federal and state agencies, and implemented aquatic restoration strategies throughout the eastern United States. Our staff has performed evaluations using multiple methodologies including the USACE's Hydrogeomorphic (HGM) Assessment and the USEPA's Rapid Bioassessment Protocols (RBP). We have also employed methods such as Vegetation Index of Biotic Integrity (VIBI) and Invertebrate Community Index (ICI) methods in addition to other state-specific quality assessment methodologies.

Eco-Tech is well versed in using the *Regional Guidebook for Assessing the Functions of Low Gradient, Riverine Wetlands in Western Kentucky*, with experience in assessing wetland baseline conditions and proposed functional lift across various project impact and mitigation sites in Kentucky, Indiana, and Georgia since 2000. Application of this functional assessment methodology has been used to calculate proposed wetland functional impacts, identify reference

standards for wetland restoration projects, and monitor multi-year functional improvement trends.

Recent Project Highlights:

- Wetland HGM functional assessment of ten wetlands complexes within the Pond Creek drainage for the Louisville Metropolitan Sewer District, Jefferson County, Kentucky.
- Wetland delineation and HGM wetland system evaluation within and adjacent to the proposed 1,679-acre Seven Hills Permit Area for United Minerals Company, Warrick County, Indiana.
- Baseline HGM assessment of seven potential wetland mitigation sites within Warrick, Spencer, Gibson, and Pike Counties, Indiana for Peabody Energy.
- Wetland delineation, groundwater monitoring, and HGM assessment of four permittee-responsible mitigation sites totaling over 500 acres for the Fayette County Board of Commissioners associated with the Lake McIntosh Public Water Supply Reservoir, Fayette, Meriwether, and Spalding Counties, Georgia.
- Wetland delineation, groundwater monitoring, and HGM compliance assessment of the 10-acre Beaverdam Creek Mitigation Site associated with the Newton County Landfill Expansion, Newton County, Georgia.
- Wetland delineation, groundwater monitoring, and baseline HGM functional assessment of the 192-acre Big Indian Creek Mitigation Site for the Carroll County Water Authority associated with the proposed Indian Creek Public Drinking Water Supply Reservoir, Carroll County, Georgia.
- Wetland delineation, groundwater monitoring, and baseline HGM functional assessment of the 31-acre White Sulphur Creek Mitigation Site and 37-acre Mulberry Creek Mitigation Site for the South Fulton Regional Municipal Water Authority associated with the proposed Bear Creek Public Drinking Water Supply Reservoir, Meriwether and Harris Counties, Georgia.
- Wetland delineation, groundwater monitoring, and baseline HGM functional assessment of the proposed 1,242-acre Bear Creek Public Drinking Water Supply Reservoir and five associated mitigation sites totaling 924 acres for the Newton County Board of Commissioners, Newton and Jones Counties, Georgia.